

In the claims

1. (currently amended) Miniaturized gas chromatograph ~~with comprising~~ at least one injector (1), one separation column (2) and a detector (3) wherein the injector (1), separation column (2) and the detector (3) are combined on a circuit board (4) to give a gas chromatography module (5), and the injector (1) comprises a first sheet (6) with channels (12) ~~which is provided with~~ and a second sheet (7) with channels (13) and which may be displaced relative to the latter, whereby at least one of the sheets (6, 7) is provided with a layer (8) of plastic on the side of the sheet facing the other sheet (7, 6).

2. (currently amended) Miniaturized gas chromatograph pursuant to claim 1, ~~characterized in that~~ wherein the plastic is chemically inert.

3. (currently amended) Miniaturized gas chromatograph pursuant to claim 1 ~~or 2~~, ~~characterized in that~~ wherein the layer (8) of plastic is applied by plasma polymerization of organic monomers.

4. (currently amended) Miniaturized gas chromatograph pursuant to claim 3, ~~characterized in that~~ wherein the organic monomers are difluoromethane, hexafluorobutadiene and/or octafluorocyclobutane.

5. (currently amended) Miniaturized gas chromatograph pursuant to ~~one of the~~ ~~aforementioned claims~~, ~~characterized in that~~ claim 1, wherein the sheets (6, 7) are made of silicon.

6. (currently amended) Miniaturized gas chromatograph pursuant to ~~one of the~~ ~~aforementioned claims~~, ~~characterized in that~~ claim 1, wherein the plastic has a lower coefficient of static friction than silicon.

7. (currently amended) Miniaturized gas chromatograph pursuant to ~~one of the~~ ~~aforementioned claims~~, ~~characterized in that~~ additionally claim 1, further comprising a control and evaluation unit (9) ~~is provided~~ on the circuit board (4).

8. (currently amended) Miniaturized gas chromatograph pursuant to ~~one of the~~ one of the ~~aforementioned claims, characterized in that the~~ claim 1, further comprising at least one ~~heating element (10) configured such that one or more of the~~ injector (1) and/or, the ~~separation column (2) and/or the detector (3) can be temperature-controlled with the help~~ of heating elements (10).

9. (currently amended) Miniaturized gas chromatograph pursuant to claim 8, ~~characterized in that the~~ wherein at least one heating elements element (10) are comprises ceramic plates with thick film heating elements.

10. (currently amended) Miniaturized gas chromatograph pursuant to claim 8 ~~or 9,~~ characterized in that comprising a plurality of ~~recesses (15, 23, 24) are provided in the~~ circuit board (4) for the purpose of protecting such that the electronic control and evaluation unit (9) is protected from the heat emitted by the heating elements (10).

11. (currently amended) Miniaturized gas chromatograph pursuant to ~~one of the~~ one of the ~~aforementioned claims, characterized in that~~ claim 1, wherein the second sheet (7) is covered by a cover sheet (11), ~~preferably a borosilicate glass sheet.~~

12. (currently amended) Miniaturized gas chromatograph pursuant to ~~one of the~~ one of the ~~aforementioned claims, characterized in that~~ claim 1, wherein the first sheet (6) comprises at least three channels (12), and the second sheet (7) comprises at least two supply channels (13) and two discharge channels (14).

13. (currently amended) Miniaturized gas chromatograph pursuant to ~~one of the~~ one of the ~~aforementioned claims, characterized in that~~ claim 1, further comprising a plurality of ~~recesses (16) are provided in the circuit board into which~~ a plurality of capillaries (18); ~~preferably glass capillaries~~ are countersunk for the gas flow.

14. (currently amended) Miniaturized gas chromatograph pursuant to ~~one of the~~ one of the ~~aforementioned claims, characterized in that~~ claim 1, further comprising an electromechanic drive (17) ~~is provided that~~ displaces the first sheet (6) relative to the second sheet (7).

15. (previously presented) Miniaturized gas chromatograph pursuant to claim 14, characterized in that the electromechanic drive (17) is a linear motor.

16. (previously presented). Miniaturized gas chromatograph pursuant to claim 14, characterized in that the electromechanic drive (17) is a bistable magnet system.

17. (currently amended) Miniaturized gas chromatograph pursuant to ~~one of the~~ one of the ~~aforementioned claims, characterized in that~~ claim 1, wherein the detector (3) that ~~preferably is a thermal conductivity detector, is provided with~~ comprises a gas flow sensor whose signals enable a correction of the base line.

18. (currently amended) Injector, particularly for a miniaturized gas chromatograph, ~~characterized in that the injector (1) comprises~~ comprising a first sheet (6) with channels (12) ~~which is provided with, and~~ and a second sheet (7) with channels (13) and which may be displaced relative to the latter, whereby at least one of the sheets (6, 7) is provided with a layer (8) of plastic on the side of the sheet facing the other sheet (6,7).

19. (currently amended) Injector, pursuant to claim 18, ~~characterized in that~~ wherein the plastic is chemically inert.

20. (currently amended) Injector pursuant to claim 18 ~~or 19, characterized in that~~ wherein the layer (8) of plastic is applied by plasma polymerization of organic monomers.

21. (currently amended) Injector pursuant to claim 20, ~~characterized in that~~ wherein the organic monomers are difluoromethane, hexafluorobutadiene and/or octafluorocyclobutane.

22. (currently amended) Injector pursuant to ~~one of the claims~~ claim 18 ~~to 21,~~ 18 to 21, ~~characterized in that,~~ wherein the plastic has a lower coefficient of static friction than silicon.

23. (currently amended) Injector pursuant to ~~one of the claims~~claim 18 to 22, ~~characterized in that~~wherein the second sheet (7) is covered by a cover sheet (11), preferably a borosilicate glass sheet.

24. (currently amended) Injector pursuant to ~~one of the claims~~claim 18 to 23, ~~characterized in that~~further comprising an electromechanic drive (17) ~~is provided that~~ displaces the first sheet (6) relative to the second sheet (7).

25. (currently amended) Injector pursuant to claim 24, ~~characterized in that~~wherein the electromechanic drive (17) is a linear motor.

26. (currently amended) Injector pursuant to claim 24, ~~characterized in that~~wherein the electromechanic drive (17) is a bistable magnet system.